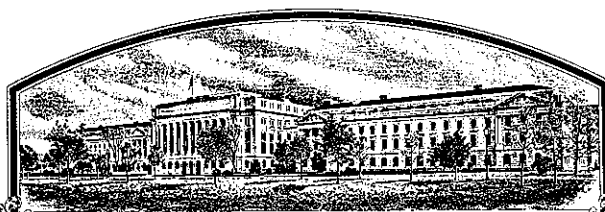


No.

8300014



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Delta and Pine Land Company**

Whereas, THERE HAS BEEN PRESENTED TO THE

**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Deltapine 417'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 28th day of November in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

*Kenneth H. Evans*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*John R. Block*  
Secretary of Agriculture

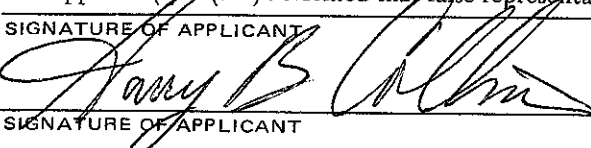
U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

FORM APPROVED: OMB NO. 0581-0005

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) Delta and Pine Land Company		2. TEMPORARY DESIGNATION Deltapine 416	3. VARIETY NAME Deltapine 417
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) Scott, Mississippi 38772		5. PHONE (Include area code) 601/742-3351	FOR OFFICIAL USE ONLY PVPO NUMBER 8300014
6. GENUS AND SPECIES NAME Glycine max	7. FAMILY NAME (Botanical) Leguminosae		FILING DATE NOVEMBER 4, 1982 TIME 2:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.
8. KIND NAME Soybean	9. DATE OF DETERMINATION November 1976		FEES RECEIVED AMOUNT FOR FILING \$ 500.00 DATE 11/4/82 AMOUNT FOR CERTIFICATE \$ 250.00 DATE 11/16/83
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation			11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware
12. DATE OF INCORPORATION			
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Harry B. Collins Delta and Pine Land Company Scott, Mississippi 38772			
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED			
a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)		c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)	
b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement		d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of the Variety	
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) <input type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input checked="" type="checkbox"/> No			
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> Yes <input type="checkbox"/> No		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> Foundation <input type="checkbox"/> Registered <input type="checkbox"/> Certified	
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No			
19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No			
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT 		DATE 9-14-82	
SIGNATURE OF APPLICANT		DATE 1	

## EXHIBIT A

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 417Origin and Breeding History of the Variety

Deltapine 417 originated from the cross Davis x N66-1136. N66-1136 was a North Carolina breeding line. The pedigree method of breeding was employed in selecting this variety. In 1976, an F4 plant row was bulked for yield testing in 1977. Concurrent yield testing and increasing of this line, then known as experimental strain Deltapine 504, was carried out. Observations and roguing were conducted for four years on each increase generation through the year 1980. Based on these observations, Deltapine 417 is stable for all observable characteristics.

Based on yield data obtained in 1977, Deltapine 417 was included in more advanced tests in 1978 and in more tests and locations in succeeding years. In 1981 Deltapine 417 was included in yield tests conducted by Delta and Pine Land Company personnel and by several state experiment stations in the Southeastern United States, the Mid-South and the Gulf Coast of Texas. This variety was tested under the name Deltapine 416 in 1981 but subsequently the name was changed to Deltapine 417.

FREQUENCIES OF VARIANTS ARE GIVEN UNDER EXHIBIT D

R/S 12/2/82

## EXHIBIT B

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 417Novelty Statement

Deltapine 417 is most similar to the variety Bragg. The principal differences between Deltapine 417 and Bragg are pubescence color, hilum color, seed coat luster and seed coat color and seed size. Deltapine 417 has a grey pubescence and Bragg has a tawny pubescence. The seed of Deltapine 417 has a buff hilum and the hilum of Bragg is black. The seed coat of Deltapine 417 is very dull and Bragg has a moderately shiny seed coat. The seed coat color is a considerably lighter yellow than the seed coat of Bragg. The seed of Deltapine 417 is smaller (3314 seed per pound) than the seed of Bragg (3131 seed per pound).

TABLE B I  
AVERAGE DATA FOR 23 TESTS CONDUCTED IN MISSISSIPPI, LOUISIANA,  
ARKANSAS, NORTH CAROLINA, AND SOUTH CAROLINA IN 1979, 1980, AND 1981

	<u>Deltapine 417</u>	<u>Bragg</u>	<u>Difference</u>
Flower Color <sup>1/</sup>	W	W	No
Pubescence Color <sup>2/</sup>	G	T	Yes
Plant Height (cm)	110.7	104.9	+5.8
Height 1st Pod From Ground (cm)	12.3	12.5	-0.2
Date of Maturity	10-30	10-29	+1
Lodging <sup>3/</sup>	1.7	1.8	-0.1
Metribuzin Reaction <sup>4/</sup>	1.4	1.6	-0.2
Foliar Feeding Insect Damage <sup>5/</sup>	2.0	2.3	-0.3
Foliage Color <sup>6/</sup>	1.8	1.8	0
Protein Content (%)	39.1	39.7	-0.6
Oil Content (%)	20.4	20.4	0
Weight gm/100 Seed	13.7	14.5	-0.8
Seed Quality Rating <sup>7/</sup>	1.5	1.2	+0.3
Seed Coat Luster <sup>8/</sup>	4.4	2.1	+2.3
Seed Coat Color <sup>9/</sup>	3.6	2.1	+1.5
Hilum Color	Bf	Bl	Yes

1/ P = Purple  
W = White

2/ T = Tawny  
G = Grey

3/ 1 = No lodging  
5 = Severe lodging

4/ 1 = Very tolerant  
5 = Plants killed

5/ 1 = No feeding  
5 = Completely skeletonized

6/ 1 = Very light green  
5 = Very dark green

7/ 1 = Very good quality  
5 = Very poor quality

8/ 1 = Very shiny  
5 = Very dull

9/ 1 = Deep yellow  
5 = Light yellow

TABLE B I 1  
AVERAGE DATA FOR 14 TESTS CONDUCTED IN MISSISSIPPI, LOUISIANA,  
ARKANSAS, NORTH CAROLINA, AND SOUTH CAROLINA IN 1981

	<u>Deltapine 417</u>	<u>Bragg</u>	<u>Difference</u>
Flower Color <sup>1/</sup>	W	W	No
Pubescence Color <sup>2/</sup>	G	T	Yes
Plant Height (cm)	111.2	103.4	+9.2
Height 1st Pod From Ground (cm)	12.7	12.8	-0.1
Date of Maturity	10-29	10-26	+3
Lodging <sup>3/</sup>	1.9	1.9	0
Metribuzin Reaction <sup>4/</sup>	1.4	1.6	-0.2
Foliar Feeding Insect Damage <sup>5/</sup>	2.0	2.3	-0.3
Foliage Color <sup>6/</sup>	1.8	1.8	0
Weight gm/100 Seed	14.2	13.5	+0.7
Seed Quality Rating <sup>7/</sup>	1.6	1.3	+0.3
Seed Coat Luster <sup>8/</sup>	4.6	2.5	+2.1
Seed Coat Color <sup>9/</sup>	3.6	2.5	+1.1
Hilum Color	Bf	Bl	Yes

1/ P = Purple  
W = White

2/ T = Tawny  
G = Grey

3/ 1 = No lodging  
5 = Severe lodging

4/ 1 = Very tolerant  
5 = Plants killed

5/ 1 = No feeding  
5 = Completely skeletonized

6/ 1 = Very light green  
5 = Very dark green

7/ 1 = Very good quality  
5 = Very poor quality

8/ 1 = Very shiny  
5 = Very dull

9/ 1 = Deep yellow  
5 = Light yellow

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY  
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Delta and Pine Land Company	FOR OFFICIAL USE ONLY PVPO NUMBER 8300014
ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code) Scott, Mississippi 38772	VARIETY NAME OR TEMPORARY DESIGNATION DELTAPINE 417

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE: <input type="checkbox"/> 1 = SPHERICAL <input type="checkbox"/> 2 = SPHERICAL FLATTENED <input type="checkbox"/> 3 = ELONGATE <input type="checkbox"/> 4 = OTHER (Specify)	
2. SEED COAT COLOR: <input type="checkbox"/> 1 = YELLOW <input type="checkbox"/> 2 = GREEN <input type="checkbox"/> 3 = BROWN <input type="checkbox"/> 4 = BLACK <input type="checkbox"/> 5 = OTHER (Specify)	SHADE: <input type="checkbox"/> 1 = LIGHT <input type="checkbox"/> 2 = MEDIUM <input type="checkbox"/> 3 = DARK
3. SEED COAT LUSTER: <input type="checkbox"/> 1 = DULL <input type="checkbox"/> 2 = SHINY	4. SEED SIZE <input type="checkbox"/> 1 <input type="checkbox"/> 4 GRAMS PER 100 SEEDS
5. HILUM COLOR: <input type="checkbox"/> 1 = BUFF <input type="checkbox"/> 2 = YELLOW <input type="checkbox"/> 3 = BROWN <input type="checkbox"/> 4 = GRAY <input type="checkbox"/> 5 = IMPERFECT BLACK <input type="checkbox"/> 6 = BLACK <input type="checkbox"/> 7 = OTHER (Specify)	SHADE: <input type="checkbox"/> 1 = LIGHT <input type="checkbox"/> 2 = MEDIUM <input type="checkbox"/> 3 = DARK
6. COTYLEDON COLOR: <input type="checkbox"/> 1 = YELLOW <input type="checkbox"/> 2 = GREEN	7. LEAFLET SIZE (See Reverse): <input type="checkbox"/> 1 = SMALL <input type="checkbox"/> 2 = MEDIUM <input type="checkbox"/> 3 = LARGE
8. LEAFLET SHAPE: <input type="checkbox"/> 1 = OVATE <input type="checkbox"/> 2 = OBLONG <input type="checkbox"/> 3 = LANCEOLATE <input type="checkbox"/> 4 = ELLIPTICAL <input type="checkbox"/> 5 = OTHER (Specify)	
9. LEAF COLOR (See reverse): <input type="checkbox"/> 1 = LIGHT GREEN <input type="checkbox"/> 2 = MEDIUM GREEN <input type="checkbox"/> 3 = DARK GREEN	10. FLOWER COLOR: <input type="checkbox"/> 1 = WHITE <input type="checkbox"/> 2 = PURPLE <input type="checkbox"/> 3 = OTHER (Specify)
11. POD COLOR: <input type="checkbox"/> 1 = TAN <input type="checkbox"/> 2 = BROWN <input type="checkbox"/> 3 = BLACK	12. POD SET: <input type="checkbox"/> 1 = SCATTERED <input type="checkbox"/> 2 = CONCENTRATED
13. PLANT PUBESCENCE COLOR: <input type="checkbox"/> 1 = GRAY <input type="checkbox"/> 2 = BROWN <input type="checkbox"/> 3 = OTHER (Specify)	SHADE: <input type="checkbox"/> 1 = LIGHT <input type="checkbox"/> 2 = MEDIUM <input type="checkbox"/> 3 = DARK
14. PLANT TYPES (See Reverse): <input type="checkbox"/> 1 = SLENDER <input type="checkbox"/> 2 = BUSHY <input type="checkbox"/> 3 = INTERMEDIATE	15. PLANT HABIT: <input type="checkbox"/> 1 = DETERMINATE <input type="checkbox"/> 2 = INDETERMINATE <input type="checkbox"/> 3 = OTHER (Specify)
16. HYPOCOTYL COLOR: <input type="checkbox"/> 1 = GREEN <input type="checkbox"/> 2 = PURPLE	17. SEED PROTEIN: <input type="checkbox"/> 1 = A <input type="checkbox"/> 2 = B
18. NUMBER OF DAYS TO FLOWERING (Place a zero in first box (e.g. 0 9) when days are 9 or less.) <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>	19. MATURITY GROUP: <input type="checkbox"/> 1 = 00 <input type="checkbox"/> 2 = 0 <input type="checkbox"/> 3 = I <input type="checkbox"/> 4 = II <input type="checkbox"/> 5 = III <input type="checkbox"/> 6 = IV <input type="checkbox"/> 7 = V <input type="checkbox"/> 8 = VI <input type="checkbox"/> 9 = VII <input type="checkbox"/> 10 = VIII
20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 23° C. (Place a zero in first box (e.g. 0 2) when size is 9 mm. or less.) <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> MM. LENGTH OF SEEDLING <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> MM. LENGTH OF COTYLEDON <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> MM. WIDTH OF COTYLEDON	
21. DISEASE: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)	
<input type="checkbox"/> BACTERIAL PUSTULE <input type="checkbox"/> 1 SOYBEAN CYST <input type="checkbox"/> 0 DOWNY MILDEW <input type="checkbox"/> 2 PURPLE STAIN <input type="checkbox"/> 2 POD AND STEM BLIGHT <input type="checkbox"/> 1 ROOT KNOT	<input type="checkbox"/> 0 FROGEYE <input type="checkbox"/> 2 STEM CANKER <input type="checkbox"/> 2 PHYTO-PHTHORA <input type="checkbox"/> 0 BROWN STEM ROT <input type="checkbox"/> 0 TARGET SPOT <input type="checkbox"/> 0 BROWN SPOT
<input type="checkbox"/> 0 BUD BLIGHT <input type="checkbox"/> 0 WILDFIRE <input type="checkbox"/> 0 RHIZOCTONIA ROT <input type="checkbox"/> 0 OTHER (Specify)	

**22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.**

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Bragg	Petiole angle	Bragg
Leaf shape	Bragg	Seed size	Centennial
Leaf color	Bragg	Seed shape	Bragg
Leaf surface	Bragg	Seedling pigmentation	Bragg

**23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:**

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	10-30	1.7	110.7	-	-	39.1	20.4 %	-	-
Name of similar variety Bragg	10-29	1.8	104.9	-	-	39.7	20.4		

**INSTRUCTIONS**

**GENERAL:** The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

**LEAF COLOR:** Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

**LEAF SIZE:** The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

**PLANT TYPE:** The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"



## EXHIBIT D

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 417Additional Description of the Variety

Deltapine 417 is a group VII maturity soybean variety which matures approximately a day later than Bragg. It has white flowers, a grey pubescence, and a tan pod wall. The leaves of Deltapine 417 are ovate in shape. The foliage color of Deltapine 417 is relatively light and very similar to Bragg in this respect. It is considerably lighter in color than Deltapine 246, Tracy M, and Davis. The seed coat is quite dull and the seed coat color is medium yellow. The hilum color is buff. The seed of Deltapine 417 (3314 seed per pound) is similar to Centennial (3363 seed per pound) in size. Deltapine 417 has larger seeds than that of Deltapine 246 (3550 seed per pound) and smaller seeds than that of Bragg (3131 seed per pound) and Deltapine 506 (3243 seed per pound). Deltapine 417 is lower in protein content (39.1%) than Deltapine 506 (39.4%), Bragg (39.7%), Deltapine 246 (39.8%), and Centennial (40.4%). Deltapine 417 (20.4%) is similar to Bragg (20.4%) in oil content, higher than Deltapine 506 (19.9%) and Centennial (19.8%) and lower than Deltapine 246 (21.5%) in oil content. Deltapine 417 does not exhibit hypocotyl resistance to Phytophthora megasperma (races 1 and 2) which causes Phytophthora root rot but has exhibited field resistance. Deltapine 417 is taller (110.7 cm) than Bragg (104.9 cm), Deltapine 506 (99.9 cm), Centennial (92.6 cm), and Deltapine 246 (76.4 cm).

As stated above, Deltapine 417 has white flowers. Deltapine 417 has up to one (1) plant with purple flowers in 2,000 plants. Deltapine 417 has a grey pubescence with up to one (1) plant with tawny pubescence in 2,000 plants. Deltapine 417 has a buff hilum with no more than one (1) seed in 2,000 with a color other than Buff.